

Data descriptor: Spatial distribution of arable and abandoned land across former Soviet Union countries

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Abstract

© The Author(s) 2018. Knowledge of the spatial distribution of agricultural abandonment following the collapse of the Soviet Union is highly uncertain. To help improve this situation, we have developed a new map of arable and abandoned land for 2010 at a 10 arc-second resolution. We have fused together existing land cover and land use maps at different temporal and spatial scales for the former Soviet Union (fSU) using a training data set collected from visual interpretation of very high resolution (VHR) imagery. We have also collected an independent validation data set to assess the map accuracy. The overall accuracies of the map by region and country, i.e. Caucasus, Belarus, Kazakhstan, Republic of Moldova, Russian Federation and Ukraine, are $90\pm2\%$, $84\pm2\%$, $92\pm1\%$, $78\pm3\%$, $95\pm1\%$, $83\pm2\%$, respectively. This new product can be used for numerous applications including the modelling of biogeochemical cycles, land-use modelling, the assessment of trade-offs between ecosystem services and land-use potentials (e.g., agricultural production), among others.

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